

### DETAILED ACTION

1. This action is in response to the amendment filed on October 26, 2009. Claims 4-8 and 11 are pending and have been considered below.

### EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Eric J. Robinson on January 12, 2009.

The Claims in the application has been amended as follows.

#### **In the Claims:**

- (1) In claim 4; replace lines 4-5 with the following **—a receiver that receives data transmitted from the transmitter; wherein—**.
- (2) In claim 4, line 9; replace **“a”** between **“converting”** and **“binary”** with **—the—**.
- (3) In claim 4, line 22; insert **-wherein-** at the end of the line.

(4) In claim 4, line 32; replace “a” between “**decoding**” and “**binary**” with –  
**the-**.

***Allowable Subject Matter***

3. Claims 4-8 and 11 are allowed.
4. The following is an examiner's statement of reasons for allowance: The prior art of record discloses a system and method for mobile communication by modulating multilevel signal, but fails to disclose that the system includes demodulating means for demodulating the signal transmitted from the transmitter and received and outputting a  $2(n+1)$ -ary signal with another or second base band filter that blocks an unnecessary frequency component of the  $2(n+1)$ -ary signal outputted from demodulating means and outputs the  $2(n+1)$ -ary signal binary signal converting means for sequentially converting a  $2(n+1)$ -ary signal inputted from the second base band filter into a binary signal of  $(n+1)$  bits and outputting the binary signal where decoding a binary signal and outputting the predetermined data when given symbols are alternately repeated.
5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Payne et al. (US 7,359,450) discloses a system and method for broadcasting HDTV signals.
- b. Raheli et al. (US 6,389,079) discloses a non-coherent sequence estimation receiver for digital modulation.
- c. Chen et al. (US 5,852,638) describes a system and method for demodulation using symbol fragmentation correlation and Fourier analysis.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HIRDEPAL SINGH whose telephone number is (571) 270-1688. The examiner can normally be reached on Mon-Fri (Alternate Friday Off) 8:30AM-6:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shuwang Liu can be reached on 571-272-3036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. S./  
Examiner, Art Unit 2611  
/Shuwang Liu/  
Supervisory Patent Examiner, Art Unit 2611